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ABSTRACT

The school-to-career movement has reached critical mass on the U.S. political stage. It is not yet clear, however, whether this movement will have any substantive effect in the lives of youth---particularly those in the "neglected majority" who are not bound to graduate from a four-year college. In comparison to their European and Japanese counterparts, U.S. youth take a much longer time in settling into a career after high school graduation, with almost 30 percent of high school graduates not established in a career by age 30. Proposals to improve school-to-work transitions for youth have centered on a new type of "tracking," with tracking's attendant negatives, that would result in a "career prep" alongside "academic prep." Questions can be asked about the possibility of this approach making things worse for disadvantaged youth, but some proponents that they could not be any worse off than with the "no-track--no career" approach common now. Any career prep approach would require sound grounding in basic skills for all children and a better defined pathway to well-paying jobs. Among the pitfalls of this approach is the possibility that even if youth benefit from better career preparation, there still may not be jobs for them to put the skills to work. These questions must be further researched. (Contains 46 references.) (KC)

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The American School-to-Career Movement:

A Background Paper for Policym and Foundation Officers

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Preface

How can we foster and sustain conditions that promote the full flourishing of youth and ensure that youth [illegible] reminded daily that too many young people grow up with their survival at stake, lacking the supports they [illegible] deserve. As a society, we must put forth our best collective efforts to help ensure that young people grow up healthy and whole, build meaningful lives, and contribute to the vitality of their families and communities.

A commitment to the healthy development of young people drives the Lilly Endowment's Youth Development Agenda. Therefore, we have a continuing concern about the preparation of young people for their life career or *calling*, for without preparation for this transition there can be no full flourishing.

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Preface Continued from Cover I

The Lilly Endowment commissioned this paper, "THE AMERICAN SCHOOL TO CAREER MOVEMENT: A Background Paper for Policymakers and Foundation Officers," in order to offer foundation officers and policymakers a broad review and analysis of the issues, questions, and challenges within the School to Career Movement. We hope it contributes to enhancing conversations, strengthening policy making and inviting challenging grant making.

Nan Skelton
Program Director, Education
Lilly Endowment

July, 1994

Introduction

Over the past several years, the school-to-work—or more aptly, "school-to-career"—transition has gained nationwide attention. Both President Bush and then-Governor Bill Clinton called for national youth apprenticeship programs during the 1992 election, and President Clinton signed the "School to Work Opportunities Act" on May 4, 1994, authorizing $300 million in new federal spending next fiscal year.

This new federal response echoes a flurry of program and policy initiatives at the state and local levels. Variously initiated by governors, legislators, educators, private industry councils, business groups, and nonprofit concerns, these school-to-career initiatives together represent the most energetic movement now underway to alter or reform our nation's approach to youth development.

The school-to-career movement has reached critical mass on the American political stage. However, it is not yet clear whether this movement will have any substantive effect in the lives of American youth—particularly those in the "neglected majority" who are not bound to graduate from a four-year college.

Will the intellectual fervor behind school-to-career issues and the budding program experimentation ultimately yield significant change in how we in America prepare the neglected majority for work and adulthood? Or is this movement destined to lose steam, yielding only isolated and tangential "programs" rather than a reformulated youth development system?

And if the school-to-career movement does succeed in changing youth development in America, will that change be for the better? Will it bring long-overdue relevance to secondary school education for those not aspiring to a baccalaureate degree, and will it provide them with the clear path they now lack to adult careers that offer dignity and a living wage? Or will the school-to-career movement, as critics and doubters fear, only add legitimacy to a still-inferior non-academic track that discriminates against less advantaged students and perpetuates the inequities of our society?

With these profound questions unanswered, and with the body politic's fleeting attention focused on it squarely, the school-to-career movement now faces its moment of truth.

The time is propitious for foundations and policymakers to step back and review the school-to-career movement in its totality. Only with a firm understanding of the movement's history and foundations, its current challenges and dilemmas, debates and quandaries, can we develop a school-to-career system that fosters the full flourishing of our nation's young people.

What's All the Fuss About? The Case for Building an American School-to-Career Transition System

A tension has always existed in American schooling between the goals of education for employment and education for citizenship or personal development. Over time, however, a *de facto* understanding (albeit an uneasy one) has emerged that preparation for work is a legitimate goal of schooling—provided it is not the only or even the central goal. Given that self-support is a fundamental responsibility of citizenship, and given that schools are our society's primary youth development institutions, preparing youth for work will likely long remain an integral facet of the American educational enterprise.

Acceptance of work preparation as an explicit goal of the schools was evident early in this century when the federal government began funding vocational education. In recent decades cooperative education—in which students receive school credit for supervised part-time employment—has become an option for hundreds of thousands of youth. Likewise, agricultural education, bolstered by related programs like 4-H and Future Farmers of America, has long provided career development and skill building opportunities to youth considering careers in agribusiness.

But the current wave of energy and attention to career preparation did not find its three taproots until the 1980s: (1) the national education reform movement; (2) growing understanding that skill requirements in the American labor market are changing rapidly; and (3) growing appreciation for the systemic and effective school-to-career systems of other advanced democracies.

Diagnosing The Educational Malaise

The current flurry of interest in education reform began in 1983 when the National Commission on Excellence in Education published *A Nation at Risk*. The report galvanized media and political attention to the poor performance of American students vis-a-vis their counterparts in Europe and Northeast Asia, and it blamed the educational malaise on lack of discipline, low standards, and inattention to the academic basics.

More than a decade later, however, despite significant new spending by most states and a vast array of new standards, programs, and other reform initiatives, there is little sense anywhere in the nation that the education problem has been solved or that it has grown any less critical. What a decade of reform has produced is a much sharper focus on the nature of the educational challenge: rather than a "back to basics" approach of more and better academic instruction for all students, as many reformers advocated in the mid-1980s, most education experts now share a belief that traditional education systems and teaching strategies are fundamentally ill-suited to many students and to the times in which we live.

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It is now generally agreed that preparing students for university or four-year college education is not the primary problem. American universities remain the envy of the world, and our four year college-going and graduation rates compare favorably with other nations of the industrialized world. Because admission standards to four-year colleges are clearly drawn, college-prep students are motivated to perform well and learn. And because guidance for college-prep students is extensive, the pathway to four-year college is neither vague nor mysterious.

"Clearly, college experience is one of the best ways to develop one's talents," explained the William T. Grant Foundation's Commission on Work, Family and Citizenship. "[But] there are many opportunities outside the college classroom to develop skills and talents and many ways to contribute to a stronger America and to successful personal and family life that do not require a college degree." Unfortunately, experts agree, America's

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Stephen Hamilton and Mary Agnes Hamilton

educational system for the 75 percent of youth who don't earn a baccalaureate degree is dangerously second rate.

Lack of incentives: "High school students who do not enroll in selective colleges realize they need not exert themselves," write Stephen and Mary Agnes Hamilton, who direct Cornell University's Youth Apprenticeship Demonstration Project in Broome County, NY. "Their performance in high school has little or nothing to do with their employment opportunities for the first several years after graduation. Neither grades earned nor the difficulty of courses they took matter... [As a result] they drift through high school taking the minimum number of the easiest courses and doing as little work as possible."

"Most employers look at the high school diploma as evidence of staying power, not academic achievement," the Commission on the Skills of the American Workforce found in its widely publicized 1990 report, *America's Choice: high skills or low wages!* "They realized long ago that it is possible to graduate from high school in this country and still be functionally illiterate. As a result, the non-college bound youth know that their performance in high school is likely to have little or no bearing on the type of employment they manage to find."

Therefore, says Richard Kazis, vice president for policy and research at Jobs for the Future, "the last couple of years of high school become a holding tank for those not going on to college."

Irrelevant curricula: Public school students not aspiring to attend four-year college are generally grouped into one of two problematic tracks—vocational education or general education.

"Though high school vocational education in the U.S. has been supported by the federal government for over 70 years and enrolls about 5 million students annually," the MIT Commission on Industrial Productivity concluded in its 1989 study, *Made in America*, "it has very disappointing performance and is not generally viewed as a viable pre-employment training system."

"The curricula used to instruct [vocational] students generally do not reflect the needs of the future labor market...Academic courses for students in vocational tracks are generally out of date and watered down to the lowest possible level," Monika Kosmahl Aring, director of the Institute for Education and Employment, wrote recently in the *Phi Delta Kappan*. "Generally speaking, employers do not see vocational high school programs as a prime source of skilled or even trainable workers. Indeed, the very fact of having participated in a vocational program often 'stigmatizes workers in the eyes of employers'," Aring wrote, citing the *Made in America* report.

The general education track, characterized by low expectations and little coherence, is equally weak. Variously described as "shopping mall [schooling] without a clear plan or purpose" and "a large buffet of scholastic junk food," the general track often consists of a series of unrelated and watered-down classes that prepare students neither for work nor further study. Classes are still taught in a traditional academic fashion—teaching isolated facts or generic skills—that many students find painfully boring or irrelevant.

"Most kids think [academic] education methods are torture devices invented by teachers," says Stephen Hamilton. "And they get that idea because they can see that no one in the workplace is doing these things." Jack Jennings, General Counsel for Education for the U.S. House Education and Labor Committee, agrees: "It's evident that the vast majority of kids in high school are not

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Stephen Hamilton

motivated," he says. "We don't seem to be approaching them in ways that engage them in learning."

This common sense observation has been bolstered in recent years by a spate of new research in the cognitive sciences which finds the traditional American approach to schooling excessively "artificial or unauthentic" because it consistently fails to integrate "real world situations in which what is being learned will be used."

"Historically, U.S. schools maintained a dichotomy between academic and vocational courses," writes Kazis. "Academic courses got you ready for college; vocational courses got you ready for work. Academic courses stayed away from applied, work-related approaches to instruction. Vocational courses were rarely used as opportunities to introduce or reinforce basic academic skills in reading, writing, math or science... The division perpetuated an unfair tracking system; it failed to provide students with the basic skills they needed to function in the workplace; and it flew in the face of how people learn."

This emerging appreciation for "contextual" or "applied" learning led the Congress in 1990 to change the emphasis of its Perkins Vocational Education Act, requiring that schools seek to integrate academics into their vocational instruction. Enthusiasm for applied learning is also providing much of the momentum behind the school-to-career movement.

Lack of career guidance: According to Anne Heald, director of the University of Maryland's Center on Learning and Competitiveness, "We have no real guidance system in American education except for those going to college." Gary Orfield and Faith Paul, authors of the Lilly Endowment funded *High Hopes, Long Odds*, a study of Indiana youth, agree: "Students not bound for college need the most help, receive the least assistance, are equipped with the most limited information, and experience the greatest risks in the job market."

Nationwide, a 1994 Gallup poll found that 72 percent of adults with jobs believe they did not obtain sufficient information about job options when they began working; and for those who ended their formal education with a high school diploma, only one in six reported that they had talked about careers with high school counselors.

Only one-fourth of Indiana school counselors say their school's principal believes that "increasing the employability of work-bound students" is a "very important" goal of counseling, Orfield found, and only half of the counselors themselves believe that "helping students with career planning" is "very important." Nationwide, a 1990 survey found, only 25 percent of high school counselors spend 30 percent or more of their time helping students with occupational choice or career planning, and only 4 percent spend 30 percent or more of their time helping work-bound students find jobs.

Given the increasingly complex task of entering and succeeding in the job market (plus the challenge youth confront in facing down the epidemic incidence of drugs, sex, alcohol, and delinquency), good guidance is crucial to the successful maturation of our youth. To cite *Guiding Children to Success*: "If we hold to the original meaning of the word education—to lead forth—the goals of guidance are synonymous with the goals of schooling. Good guidance is no antidote for bad schooling; but neither can good schooling occur without good guidance."

Unfortunately, a 1993 study from the U.S. Department of Labor found, "Fully formed career guidance programs are a rarity in American K-12 school systems."

The Next Industrial Divide: Education And Economic Change

The preceding analysis makes clear what few education experts would deny: that the schooling typically provided the majority of American youth—those not destined for a baccalaureate degree—is unchallenging, incoherent, uninspired. Seldom are these youth enrolled in engaging or relevant courses. Seldom are they provided guidance or exposure to labor market realities that might enable them to develop the skills required by employers or to make a smooth and successful transition from school and adolescence to adulthood and gainful employment.

Why does our educational system so poorly serve these youth? In *Thinking for a Living: Education and the Wealth of Nations*, Ray Marshall and Marc Tucker explain that the present system, though uninspired, has fit snugly into America's humming economic engine: "For much of this century, and indeed, right up to the present, American enterprise has been organized on the principle that most of us do not need to know much to do the work that has to be done... [Therefore] we adopted the principle of mass producing low-quality education to create a low-skilled workforce for mass-production industry."

"The mass production model... places great emphasis on the values of regularity and tolerance for boredom; acquiring analytical skills is important for only a few," wrote the Georgia Institute of Government's John O'Looney in the *Phi Delta Kappan* last year. "Our education system... is a good match for mass production manufacturing. In both places, large numbers of worker/students are socially promoted because they attend regularly, show tolerance for rote tasks, and do not cause trouble."

However, O'Looney warned, "if education reflects the dominant model of production, our current education system is due for a major overhaul." Marshall and Tucker agree: "This system may have worked brilliantly for us until recently, but it will no longer do so."

Why not? Because the American economy is being thrust into fundamental transformation. Michael Piore and Charles Sabel have labeled this economic sea change "The Second Industrial Divide;" the Commission on the Skills of the American Workforce termed it a "Third Industrial Revolution." It is the shift—fueled by automation and ever-increasing global competition—away from a low-skill mass-production system and toward a much more skill-intensive "flexible production" system.

The productivity of American workers has been "virtually stagnant" in recent decades, Marshall and Tucker report, and real wages (after inflation) have fallen 13 percent since 1969. "Our people have been trying to maintain their standard of living by borrowing money, putting more members of their families to work, and working more jobs. But with fewer people entering the workforce... we know that a real slide in our standard of living is coming; the only question is how quickly."

The only way to avoid this catastrophe and ensure a prosperous future, they and others say, is to improve productivity. "We cannot simply do this by using better machinery, because low wage countries can now use the same machines and can still sell their products more cheaply than we can." Rather, as our European and Japanese competitors have done, American firms must scrap the old top-down, low-skill mass-production system and instead institute new "high performance" organizational structures that minimize middle management and grant non-management employees increasing responsibility.

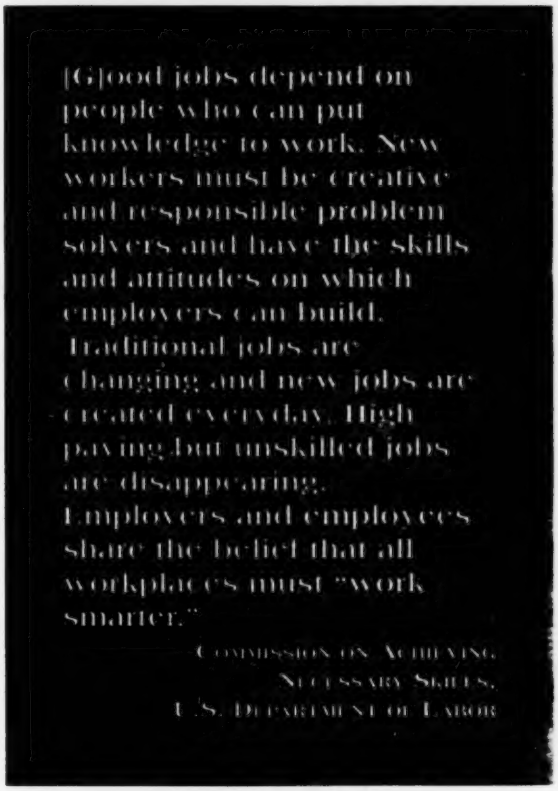
"The key to this type of production is the worker, who must be skilled in ways that only management and engineering teams are skilled under the mass production model," writes O'Looney. "More employers are discovering that they need more than just a few educated managers; they need entire work forces that are literate and have problem solving skills."

The skills crunch: Several reports in recent years have drawn attention to the increasing premium on skills in the job market—sparking nationwide concern over an impending "labor force mismatch" between the skills of workers and those increasingly required by employers.

The Hudson Institute's 1987 *Workforce 2000* study found that higher skill jobs, which made up only 24 percent of employment in 1984, would comprise 41 percent of the new jobs created between 1984 and 2000. Low skill jobs, which totaled 40 percent of 1984 employment, would make up only 27 percent of jobs emerging in the remainder of the century. Similarly, researchers at Columbia University's Institute on Education and the Economy found that higher skill jobs grew at almost two and one half times the rate of lower skill jobs between 1975 and 1990.

After 12 months talking with employers, the U.S. Department of Labor's 1991 Secretary's Commission on Achieving Necessary Skills reported that "their message to us was the same across the country and in every kind of job: good jobs depend on people who can put knowledge to work. New workers must be creative and responsible problem solvers and have the skills and attitudes on which employers can build. Traditional jobs are changing and new jobs are created everyday. High paying but unskilled jobs are disappearing. Employers and employees share the belief that all workplaces must 'work smarter'."

While some economists have questioned the findings of these studies, suggesting they overstate the pace at which the skill demands of American industry are rising,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COMMISSION ON ACHIEVING NECESSARY SKILLS, U.S. DEPARTMENT OF LABOR

there is no denying that less-educated and less-skilled workers face an increasingly tough labor market. According to the U.S. Department of Labor, in 1967, 40 percent of all jobs in America were held by workers with less than a high school diploma; by 1987 that percentage was less than 15 percent. Between 1973 and 1990 the incomes of young families headed by a high school dropout declined 45.8 percent after inflation, found Dr. Andrew Sum of Northeastern University; and income dropped 29.6 percent for young families headed by high school graduates without any post-secondary education. By contrast, young families headed by college graduates

saw their incomes grow by 2.5 percent during these years, while those headed by workers with one to three years of college saw a more modest income drop of 14.9 percent.

Youth employment: This increasing skills premium has hit young workers hardest. Only 49 percent of high school graduates under age 20 and not in college were employed full-time in 1986—down from 73 percent twelve years earlier. Among youth ages 20-24, dropouts suffered a 42.1 percent decline in wages from 1973 to 1986, while those with high school diplomas but no college suffered a 28.3 percent wage decline. Fewer than one-half of all young male workers (20-24) and fewer than one-fourth of young black male workers now earn enough to support a family of three above the poverty line.

Youth who don't go to a four-year college "often spend a few years drifting from one unskilled 'youth' job to another. These 'McJobs' are thought neither to require nor to teach skills. And since they are dominated by youth, the young workers get little chance to work with mature adult role models," reported Thomas Bailey and Donna Merritt in a 1993 paper for the Manpower Research Demonstration Corporation. Not until their mid-20s do most of these youth find "adult-type jobs" that pay fringe benefits and offer advancement opportunities, writes Paul Barton of the Educational Testing Service. And, according to MIT economist Paul Osterman, "Roughly one third of all high school graduates, and somewhat more high school dropouts, fail to find stable employment by the time they are thirty."

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—Paul Osterman

Lessons From Overseas

Far from nurturing the "full flourishing" of all youth, American society is clearly failing its neglected majority. Our schools are providing them low expectations and little guidance, and our economy is generally not providing them either a job with a future or even a visible path to such a job.

These facts provide two-thirds of the impetus behind the budding American school-to-career movement. The final argument comes from overseas—from the other advanced nations of the Western world, each of which has a highly developed and generally successful system to help youth prepare for and enter chosen careers. As Anne Heald puts it, "The United States is the only industrialized country that lacks a school-to-work system."

While career preparation varies greatly from country to country, the most successful of these foreign school-to-career systems exhibit two characteristics typically alien to American youth development: (1) high basic skills standards for all children — measured by national standards and certified by nationally recognized credentials; and (2) extensive youth apprenticeships or other forms of work-based learning.

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"Across Europe, but especially in Germanic and Scandinavian nations, strong universal programs... assure all young people an education that includes specific preparation for the world of work," wrote Jobs for the Future in 1990. "The Europeans achieve this condition by providing young people with a world-class basic education... Compulsory education in these countries demands high levels of achievement from all young people in the fundamentals (math, language, history, science, the arts). Those who have difficulty meeting these expectations get special help." Though Japan's education and training systems are quite different, Marshall and Tucker report, "the basic education standard set by the Japanese school system is probably the highest in the world."

National examinations used in Europe and the Far East to certify mastery of fundamental skills are especially use-

ful, Marshall and Tucker write, given their power "to motivate students to study hard in order to get good jobs and get into college... It is critical that everyone—teachers, principals, parents, and students—know just what is expected of them."

The second noteworthy element of foreign workforce preparation systems is apprenticeship. The German "dual-system"—so named because students are taught both in schools and workplaces—has attracted particular attention. Seventy percent of German youths between the ages of 16 and 19 participate in one of 380 apprenticeships in which they work three or four days per week on the job under the supervision of a trained craftsperson and the remaining one or two days in a state-funded technical school. Youth are paid a modest wage for their time spent on the job. At the end of their training, apprentices take an exacting national exam—set by industry along with labor unions and the education ministry—to earn a nationally recognized certificate in their chosen craft, what the Council of Chief State School Officers calls "the credential of a fully accomplished adult in society."

Through apprenticeships, the majority of German youth are able to master and gain certification in a recognized trade that qualifies them for a job that pays a living wage. More than half of all German apprentices remain with the firm where they were trained, and an even larger percentage continue on to spend their entire careers in their apprentice profession.

Critics of the German and other European educational systems cite the heavy and explicit tracking of children. As early as age 10 or 12, German children are divided "into those who may attend a university and those who may not," explains University of California scholar David Stern. "The common tracking of European students, beginning in elementary school," write David Brown and Marla Higginbotham of the National Governors' Association, "is particularly troubling to American policymakers and educators."

But advocates of the German system retort that it is not so un-democratic as critics charge. They point to three mitigating factors in the European model: (1) Unlike the U.S., Europeans do not look down on skilled trades and other professions not requiring a university education. "German apprentices are far less likely than U.S. vocational students to regard themselves as losers, relegated to a lower track compared to college-bound youth," notes Stephen Hamilton; (2) apprenticeship is not a dead end. Fifteen percent of German college graduates—and fully one-third of university-trained engineers—came up through the apprenticeship track, and 17 percent of German students who qualify for university education opt first to enroll in an apprenticeship; and (3) Germany and other European nations are now taking steps to increase the "permeability" of their systems to allow youth greater flexibility to switch back and forth between the designated tracks.

What no critic disputes is that German apprenticeships provide an extremely effective school-to-career bridge for the majority of youth—making productive, gainfully employed workers of most youth by age 20 and avoiding the widespread floundering experienced by most non-baccalaureate American youth. As Stephen Hamilton puts it, "German 18- and 19-year-olds are doing a whole range of jobs. We, meanwhile, say our teenagers aren't ready for that."

Apprenticeships can also bring much needed relevance to high school education: "High school kids need a reason to do well in school—as well as a reason to avoid the well-worn track of crime and poverty," one journalist wrote, paraphrasing Hamilton. "Youth apprenticeships can provide that incentive by tying school performance to eligibility for good apprentice positions." Albert Shanker, president of the American Federation of Teachers, goes even further: an apprenticeship system on the order of the German model, he has written, would be "worth more than all the anti-dropout programs in the country."

What's Going On? A Brief History of the School-to-Career Movement in America

The case for fundamentally reformulating America's education system and for strengthening the school-to-career connection is compelling. As the Grant Foundation's Commission on Work, Family and Citizenship concluded, "Our economy is being damaged and, more importantly, young people's lives are being damaged, by our failure to help young people make a smoother transition from school to work."

Brown and Higginbotham of the National Governors' Association put it this way: "Although only a small minority of the nation's youth achieve a bachelor's degree, the American educational system continues to focus most of its resources on the few and provides little meaningful preparation for the many, particularly the economically disadvantaged. Youth enraptured with the college dream, yet ill-equipped with either prerequisite academic or occupational skills, often have difficulty securing employment, are forced into low-wage, dead-end jobs, and often aren't able to begin to build a career until their mid-twenties. This systemic failure has implications for the nation's economic competitiveness and contributes to the social problems often associated with adolescence."

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>
> —William T. Grant Foundation Commission on Work, Family and Citizenship

Six years ago, when the Grant Foundation released its *Forgotten Half* reports and thrust non-baccalaureate youth into the national spotlight, America had not even the faint outline of a school-to-career system. "It would be wrong to say that the transition between school and the work world is the 'weakest link' in our education and training system," the Commission found, "wrong because this assumes there is a link at all."

A New School-to-Career Program Arsenal

Since that time quite a number of school-to-career initiatives have begun cropping up on the American youth development landscape. Most of the activity has been aimed at developing and replicating program models that establish links between school and work and enable youth to begin exploring and exploiting career opportunities. The most widely discussed of these fall under one of four program models: cooperative education; career academies; Tech Prep; and youth apprenticeship.

Cooperative Education: According to the General Accounting Office, about 8 percent of American High School juniors and seniors (430,000) work each school year in supervised part-time jobs organized under cooperative education programs. This makes co-op education by far the most extensive source of work-based learning available to American high school students.

Under the co-op arrangement, a classroom vocational instructor or a school-wide co-op coordinator arranges part-time jobs for students with area employers. A training plan is written for both student and employer specifying what is to be learned on the job. The teacher makes occasional visits to the student at the worksite, and a worksite supervisor evaluates the student's job performance.

Evaluations of co-op education have found that it has some modest positive effects. Co-op students express higher levels of satisfaction with school than non-co-op students, and students in supervised co-op jobs are more likely than students working in unsupervised jobs "to use reading, writing, math, and other skills on the job; learn new things; have more autonomy; find the work more intrinsically motivating; and acquire information or motivation that helps them in school."

Yet cooperative education falls far short of the comprehensive work-school linkage envisioned by advocates and

practiced by other nations. "The actual integration of co-op students' school and worksite learning varies widely and is often haphazard. Indeed, the benefits of the co-op experience are generally seen to lie in strengthened work habits and greater maturity and employability, rather than in supporting academic learning," report Bailey and Merritt. Though the stated goal of co-op education is to "integrate [the classroom and the workstation] into a total learning experience," Jobs for the Future reports that "co-op programs have little effect on classroom curricula and therefore simply reinforce the gap between the worlds of work and school."

According to a review of evaluation research by David Stern and colleagues, the unfortunate bottom line on cooperative education is this: "there is no consistent evidence that [co-op students] learn more, become more productive, or find better jobs." Moreover, despite generally positive reviews, enrollment in cooperative education has actually dwindled in the past decade, as fewer employers have chosen to participate.

Career Academies: A far more ambitious (but less widespread) model is the "career academy." Originated in 1969 at Thomas Edison High School in Philadelphia, the model was first envisioned as a strategy to retain students at risk of dropping out. When the initial academies succeeded in lowering dropout rates, the model was replicated first in other schools in Philadelphia, then in several California locations, then in Pittsburgh and Portland, Oregon.

The four essential characteristics of a career academy are: (1) each is organized as a "school within a school"; (2) each has a specific vocational or industrial theme, such as health, business, auto maintenance, or electronics; (3) academic and vocational learning are closely integrated; and (4) local employers from the relevant industry sector are heavily involved—donating equipment and services, serving as mentors, providing summer jobs and internships.

Unlike traditional vocational education, career academies provide exposure and build skills not for a specific job but a range of occupations within a given industry sector. Whereas a vocational program may prepare students to be licensed practical nurses, a career academy focused on health occupations would "encompass occupations ranging from paramedics to physicians," writes the University of California's David Stern.

Evaluations find that career academy programs have been successful both in reducing the dropout rates of participating students and increasing their enrollment rates in post-secondary schooling. One particularly effective program, the Oakland Health and Bioscience Academy, maintains a 96 percent attendance rate, and more than 80 percent of its graduates (four times Oakland's city-wide average) meet the entrance requirements to the University of California.

Despite its success, the academy model has not yet been widely replicated. Programs affiliated with the National Academy Foundation (and supported by major corporations) enrolled just over 4,000 students in 74 schools in 34 cities during the 1991-92 school year. Even in Philadelphia, which pioneered the academy model and now operates 24 programs in 16 high schools, only about 5 percent of the city's high school students enrolled in academies in 1986. Fifteen percent of Oakland high school students are now enrolled in career academy programs.

Yet academy advocates insist that the model has potential for broad replication. "Vocational academies do take additional resources, mainly for smaller class sizes and extra preparation time for teachers... [and] participation by local employers is essential and must be organized," Stern found. Nonetheless, he wrote, "The academy model is replicable, and there is unusually good evidence of its success."

Tech Prep: A more widely implemented program to integrate academic and vocational preparation has been "Tech Prep"—a partnership between secondary schools and two-year technical and community colleges to create a new "track" for students leading to an associates degree or vocational certificate in a specific career field. Sometimes called "2+2," these programs have two central goals: (1) to smooth the transition from high school to community college by coordinating course requirements and [often] by granting college credit for courses taken during high

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school, and (2) to teach students challenging academic and thinking skills via an applied curriculum that makes math, communication, technology, science, and other disciplines meaningful by placing them in a real-world, job-related context.

Like career academies, Tech Prep programs use a "cluster approach" to expose students to a range of career opportunities within a given field or industry. Unlike career academies, however, Tech Prep programs do not necessarily have close cooperation with the private sector. Though Tech Prep can lend itself to and benefit from industry involvement, Bailey and Merritt report that "in many Tech Prep programs, the links to employers are tenuous and structured workplace learning is incipient at best."

Perhaps in part because they do not require educators to take the unnatural (in America) step of forging strong ties with employers, Tech Prep stands today as one of the nation's most widely utilized school-to-career strategies. Back in June 1990, there were 122 Tech Prep programs operating in 33 states. And that was before Congress amended the Perkins Vocational Education Act and began funding Tech Prep programs with $63 million in 1991 (and more in subsequent years). As of 1990, Jobs for the Future reported, three states had mandated the creation of Tech Prep programs and six more were considering doing so. Since then Tech Prep initiatives have continued to take root throughout the country. In North Carolina, for instance, 98 of the state's 100 counties now have Tech Prep programs in the planning or implementation stages.

Though conclusive evaluations of Tech Prep have not been conducted, preliminary data suggest that—at their best—Tech Prep programs can produce excellent results. At North Carolina's Richmond County High School, the four-year dropout rate has dwindled from 27 percent to 12 percent since Tech Prep was implemented in 1986. Because of the program, Richmond County students now take tougher classes, do better in them, and enroll in much greater numbers both in two-year and four-year colleges following graduation. Likewise in Avery County, North Carolina, dropout rates were sliced significantly following introduction of Tech Prep in 1990. Enrollment in Algebra classes shot up 81 percent in county high schools while less demanding courses in General Math, Practical Math and Consumer Math were stricken from the curriculum.

Unfortunately, such ambitious and effective programs are apparently not yet the rule in Tech Prep. Integrating academic and vocational teaching requires schools to implement whole new curricula and teachers to employ a new and entirely different "applied learning" pedagogy. Such wholesale changes do not come easily, a fact that often leads to the phenomenon of new labels being placed on old bottles—particularly with new federal money available. "People take the buzzword of the day and use it to defend their own [turf]," observes former Assistant U.S. Secretary of Labor Roberts T. Jones. "When they smell currency [of an idea] or they smell money for a program, they really jump forward."

Youth Apprenticeship, American Style?

The potential approaches for improving career preparation are many—the three discussed above, plus others like school-based enterprise and service-learning, and an array of second-chance models like Job Corps, YouthBuild, youth service and conservation corps, and alternative schools. Yet in recent years one program model has monopolized much of the attention in the school-to-career debate: youth apprenticeship.

Model youth apprenticeship programs have been profiled in the *Washington Post*, *Wall Street Journal*, *Congressional Quarterly*, *Forbes*, *National Journal*, and a host of other leading periodicals in recent times. The National Alliance of Business and the Council of Chief State School Officers have each launched projects to spread the model, and Jobs for the Future, a Boston-based intermediary organization, has become a national resource for the wise implementation and replication of apprenticeship programs.

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Youth apprenticeship has attracted such attention because—when fully realized—it takes the best elements of the career academy and Tech Prep models and enhances them with substantial work-based learning leading both to formal skill certification and potential employment with sponsoring employers.

Under youth apprenticeship, students begin in the eleventh grade working part-time for a local employer in the designated industry cluster (health care, electronics, etc.). On the job they are supervised by an experienced worker under a specific learning plan. Back at school, stu-

dents are held to high academic standards, and their learning is tied explicitly to their work. After two years in the program the students earn their high school degree and have the option to apply to four-year college or move on to the second phase of the apprenticeship—a combination of community college and further work-based learning, leading to certification in the chosen trade.

Overall, reports *Congressional Quarterly*, at least 50 youth apprenticeship projects have sprung up in some 20 states since 1990. A number of states have enacted high profile youth apprenticeship initiatives as well. Arkansas implemented a state-funded demonstration program under then-Governor Clinton, and several other states—including Oregon, Wisconsin, Georgia, Pennsylvania, and Maine—have made apprenticeship a part of their education reform plans. There has also been action at the federal level. The U.S. Department of Labor established an office of work-based learning that promotes apprenticeship, and apprenticeship is a centerpiece of the new School-to-Work Opportunities Act.

Replicating Apprenticeship: For all of this energy and attention, however, youth apprenticeships remain strikingly rare in America. As of last year, the National Alliance of Business counted just 1,700 youth apprentices working in 200 companies nationwide. That compares to an estimated 1.7 million youth apprentices now training in Germany.

> The elaborate set of institutions, laws, and social norms that evolved over the course of centuries and now sustain the German apprenticeship system do not exist in the United States and could not be created by fiat. In the absence of institutions to promote their collective self-interest in a well-trained workforce, most individual employers try to minimize their own investment in training and rely on schools or other firms to train their new employees.
>
> David Stern

The German system is made possible by that nation's strong labor unions (which represent almost half of all workers), its industry-based employer "chambers" (which are descended from medieval guilds and to which every employer must belong), and a national business ethic in which "their executives have a sense of civic responsibility," says Stephen Hamilton, which allows them to write off up-front training costs on faith that a pay-off for their companies and their country will emerge later on.

"The elaborate set of institutions, laws, and social norms that evolved over the course of centuries and now sustain the German apprenticeship system do not exist in the United States and could not be created by fiat," Stern writes. "In the absence of institutions to promote their collective self-interest in a well-trained workforce, most individual employers try to minimize their own investment in training and rely on schools or other firms to train their new employees."

The prospects for widespread apprenticeships in the U.S. are further muddied by the low esteem in which most employers hold young workers—and by our society's high rates of worker turnover. "Historically, it was worker mobility that caused apprenticeship agreements to unravel in the U.S.," Stern finds, "but worker mobility is a cherished right in a free society." Employers' pay-off is especially low in apprenticeships for youth, says Columbia's Thomas Bailey: "To the extent that youth apprenticeship also opens up future educational opportunities for the graduates, a successful youth apprenticeship program will lead to many separations as students go on to higher education."

Labor unions, fearing that low-wage youth apprentices might be used to replace professional adult workers, present another obstacle. "Youth apprenticeship won't take off if it's perceived as in direct competition with current workers," says the National Alliance of Business' Garrison Moore. "Current employees will fight it, and the public will find it scandalous."

Even the strongest backers of the apprenticeship model agree that the barriers to replicating a German-style apprenticeship system in the U.S. are great. Real progress will take 11 or 12 years, Hilary Pennington told *Congressional Quarterly* in 1992. "This is truly a long-term growth issue," says Roberts Jones, who helped draft an apprenticeship bill for the Bush administration. "You can't legislate a system into existence, and you can't institutionalize it overnight."

Further, Jones says, apprenticeship "should never be used for that 70 percent [as in Germany] or some other mass number. It has to be a net benefit to employers, [and that means] you have to keep the numbers rational." Another strong apprenticeship backer, Robert Glover of the University of Texas, has said that a realistic U.S.

apprenticeship effort would involve only about 100,000 students.

Alternatives to Apprenticeship?: Bailey and Merritt remain skeptical that a significant number of employers will ever participate in a youth apprenticeship system. Instead, they suggest that schools might do better to concentrate on a range of apprentice-like or "simulated workplace" activities such as school-based enterprise, service-learning projects, and "cognitive apprenticeships" (where students work in teams to take on complex applied tasks). In addition to avoiding the difficult challenge of building school-employer partnerships, these more closely controlled apprentice-like activities make it easier for teachers to integrate work-based and school-based learning. "If employers have to be cajoled into participating," Bailey and Merritt say, "educators lose their leverage to demand that employers improve the educational experience that they offer their apprentices." Through the simulated workplace approach, they conclude, "[the country] may be able to incorporate many of the benefits of youth apprenticeship without having to wait until employers are ready to play a central role."

Backers of the apprenticeship model, however, insist that employer-based programs deserve all of the attention being placed on them. "The correlation between program quality and business involvement is striking," says Anne Heald. Jason Stump, a 17-year-old Pennsylvania apprentice agrees: "I'm actually learning stuff I'm going to be using," he says. "Like trig helped me out a couple times figuring out the blueprints." Jim Tyson, general manager of a Sylvania plant in Pennsylvania also has effusive praise for apprenticeship: "In 26 years with this company this is the best thing I have ever been involved in," he said. "Whether they are the apprentices themselves or their teachers, government officials or employers, those involved in youth apprenticeship programs often can't contain their enthusiasm," reported the *National Journal*.

Apprenticeships provide youth a welcome alternative to the "McJobs" they could otherwise expect in their teen years —"youth ghettos," Stephen Hamilton calls them. "The supervisors assigned to train apprentices often become important role models for young employees," one reporter explained. "Mentors not only teach apprentices how to do the work, they also share the basics of political savvy that increase a rookie's comfort level in the corporate world."

Apprenticeships may also be an important tool to break down the pervasive anti-youth bias of American employers. "Employers basically don't want to hire kids right out of high school," reports Lauren Resnick, director of the Learning Research and Development Center at the University of Pittsburgh. Fewer than one in ten of the nation's large employers hire new high school graduates. "We infantilize American youth and act like there's not a whole lot of good they can do," says Samuel Halperin of the American Youth Policy Forum. Stephen Hamilton agrees: "American employers say, 'Don't bother us with those kids until they've developed good work habits, until they're reliable, and until we know they're going to stick with us'." Rather than continuing to "choose against youth," as employers presently do, apprenticeships give employers "a chance to get to know and learn to trust youngsters."

> When you see students who are involved in good programs, they're turned on, motivated. I don't think there's any question that one of the main impacts of these programs is that they vastly change one's perception of what one can do and therefore what one wants. We see it over and over again. Once you succeed in learning you want more learning.
>
> —Samuel Halperin

But the biggest argument for apprenticeships, advocates say, is their effect on youth: "When you see students who are involved in good programs, they're turned on, motivated," reports Halperin. "I don't think there's any question that one of the main impacts of these programs is that they vastly change one's perception of what one can do and therefore what one wants. We see it over and over again. Once you succeed in learning you want more learning."

The System-Building Challenge

While school-to-career initiatives have been bubbling up around the country in many shapes and sizes, advocates are only now beginning to grapple with the challenge of integrating these efforts into coordinated systems.

"It is often said that in the United States we are very good at creating innovative programs, but we have a very hard time trying to build comprehensive and coherent policy systems," writes Richard Kazis of Jobs For the Future. "The school-to-work transition is a case in point."

"Youth apprenticeship risks being marginalized from the mainstream academic reform agenda," adds Hilary

Pennington. "It risks being put off as a vocational program for certain kinds of kids." Because of this danger, says Halperin, "We're all in the system-building business now."

The Onus on States: While foundations, the federal government, and concerned academics and interest groups can develop and demonstrate models and analyze issues, responsibility for meeting this system-building falls largely to the states.

The earliest model programs in the school-to-career movement emerged organically in communities as local leaders identified a need and raised the resources to implement innovative plans. Foundations played a role in financing many of these projects, and they were instrumental in generating concern over education and youth employment issues through their support for research and blue ribbon commissions which brought them to public attention.

The federal government has played a similar role funding model programs and high profile research, and in recent years it has begun providing modest ongoing funding for career preparation programs. But even in passing the new School-to-Work Opportunities Act, Congress implicitly acknowledged that ultimate responsibility for system-building lies with the states, reserving a portion of this money for a handful of lead states to construct comprehensive career pathway systems for youth.

In addition to planting the seeds for new school-to-career program initiatives and letting a thousand flowers bloom, a few states have begun the more exacting task of rewriting their education and training laws and restructuring their youth preparation and workforce training systems.

"Washington's role is chiefly to act as a catalyst for efforts by local school systems and businesses to harmonize their curricula, job training and hiring practices," write scholars Robert Lerman and Hillard Pouncy.

It is the states, then, which control most of the resources in public education and write both the curricula and program standards used in schools, who must play the central role. Several states have enacted new school-to-career programs in recent years. Arkansas set aside $1 million in 1991 and $2 million in 1992 to finance a series of new youth apprenticeship projects. Maine Governor John McKernan has also begun a series of apprenticeship pilot projects. Several states have directed funds to spread other school-to-career models. The California legislature provides state funding to support some 50 career academies around that state, and several states—including North Carolina, Michigan, Indiana, Mississippi, and Maryland — are seeking to implement Tech Prep programs statewide.

Building a Policy and Program Infrastructure: In addition to planting the seeds for new school-to-career program initiatives and letting a thousand flowers bloom, a few states have begun the more exacting task of rewriting their education and training laws and restructuring their youth preparation and workforce training systems. Indiana is one such state, having established a new Department of Workforce Development, required schools to provide a Tech Prep option for all students beginning in 1994-95, and then passed a major education reform bill in 1992 that will place all students in either a college prep or Tech Prep sequence beginning in the eleventh grade.

In New York, California, Rhode Island, Minnesota and other states, influential commissions or task forces have proposed comprehensive school-to-career policies that are now under consideration, and two states—Oregon and Wisconsin—have already enacted comprehensive reform packages that make career preparation the cornerstone of a fundamentally reformed approach to educating youth and preparing them for adulthood.

Oregon and Wisconsin both followed closely the proposals of the Commission on the Skills of the American Workforce, which recommended in its *America's Choice* report that all students prepare for an academically rigorous "Certificate of Initial Mastery" in the tenth grade. Once students receive this certificate, the Commission recommended, they should then either enter the college prep track or begin an apprenticeship, Tech Prep, career academy, or other career preparation program beginning in grade eleven.

Unfortunately, these states are the exception today. "It's not clear that most states understand the need for a system or are willing to make the hard choices to get a system," says Samuel Halperin. "It's not clear that a lot of states have done much more than change the labels."

"The real challenge in the word 'system' is the reallocation and redeployment of existing resources," Halperin says. "What passes for the general track today is just not satisfactory... Communities need to abolish [it]. They need to say that virtually all our kids are going to need some post-secondary training."

For the most part this isn't yet happening, Halperin says. "People are not convinced that what they're doing is not working."

Stepping Back: Critiquing the Ethical, Educational, and Economic Underpinnings of the School-to-Career Movement in America

The school-to-career programs studied in this paper—programs whose principal aim is employability, usually in a skilled or semi-skilled trade—may seem at first glance an odd fit with foundations' and policymakers' often humanistic missions to provide for troubled youth and to nurture the development of young people as individuals and as citizens.

But a hard look at the plight of America's young people—particularly the less advantaged 75 percent who will not earn a baccalaureate degree—shows that improving career preparation is in fact central to the youth development challenge. The available evidence leaves little doubt that these youth are being poorly served by existing youth development institutions, and little doubt that they and the rest of us are paying a heavy price for this failure.

Acknowledging these facts, however, does not imply an unquestioned endorsement of either the assumptions underlying the emerging school-to-career movement or the practical directions in which that movement is leading us. Rather, a number of pivotal and unanswered questions about the movement leap to mind.

Is It Tracking?

This question is certainly the most obvious and often asked in the school-to-career debate. Unfortunately, it is probably the wrong question, for the answer is unequivocal: YES, undoubtedly, the school-to-career movement is about creating a new educational track for young people—a pathway of applied, vocationally oriented instruction leading through post-secondary study to skilled jobs and viable careers.

School-to-career advocates are unanimous in stressing the reality that tracking is already ubiquitous in American education. "We already track, severely so," says Samuel Halperin. "We're not talking about making it worse, we're talking about making it better. We're talking about exposing the academic curriculum to the critique of the marketplace."

"I don't see how it would deepen the tracking problem," Halperin says. "You're just giving kids an option they didn't have before."

Anne Heald accuses the present educational system of maintaining a "pernicious" practice of "under the covers tracking. We do not acknowledge how severely we do track and how detrimental that is," she says. Perhaps the most succinct comment comes from a Wisconsin parent who complained, "We've got two very clear tracks right now—college prep and nowhere prep."

Somewhere prep: Certainly, creating for youth a rigorous and clearly articulated pathway (through post-secondary vocational training) to well-paying careers and infusing their course work with meaningful and applied curricula that offer some incentive to perform well and learn in school are noble objectives. Who can argue with programs that transform the existing nowhere prep track into somewhere prep?

Moreover, model school-to-career programs have produced eye-opening successes in raising both the achievements and the aspirations of youth in the neglected majority—including many who have not thrived under the old system of watered-down academics and outdated vocational classes. In Cornell's Broome County apprenticeship project, eight of the first 20 graduates moved directly to a 4-year college (including four who had poor grades and no college plans before entering the program), reports Stephen Hamilton, and another nine students enrolled in classes at local two-year colleges—many in programs leading to an associates degree in their chosen field. "The whole notion that this is somehow preventing kids from going to college is absolutely backwards," Hamilton says.

Surveys of students participating in the Oakland career academy programs reveal in a different way the value of top-notch school-to-career preparation: 48 percent of academy students strongly agreed with the statement that "my job has made me realize how important it is to learn and do well in school." By contrast, only 23 percent of co-op students and 16 percent of students working part-time jobs unrelated to school strongly agreed. Likewise, 39 per-

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cent of academy students strongly agreed with the statement that "what I have learned in school helps me do my job better." Just 12 percent of co-op students and 3 percent of students in non-school related jobs strongly agreed.

Rather than legitimizing a dead-end track leading only to low expectations and bleak prospects for poor and working class children, as critics fear, the record shows that model school-to-career programs are instead paving a new track to somewhere.

One track or two?: Because model school-to-career initiatives have shown such promise in motivating and educating youth in the neglected majority, the school-to-career movement is often typecast simply as a new-and-improved non-college track—a limited reform for children lacking the motivation or aptitude to succeed in a college prep curriculum and become college material.

> People have two perhaps mutually exclusive things in mind when they talk about school-to-work transition. Some people are talking about an alternative pathway for kids who don't respond well to the traditional academic learning environment and aren't likely to go to Harvard. Other people are saying something else, that our schools are dangerously separated from how people make a living. They're saying that all kids, whether they're going on to college or not, could use this kind of applied curriculum.
>
> —Joan Lipsitz

Many school-to-career advocates bristle at this suggestion. "If all we do is to create two tracks, I think we've done a terrible thing," says Hilary Pennington.

"People have two perhaps mutually exclusive things in mind when they talk about school-to-work transition," explains Joan Lipsitz of the Lilly Endowment. "Some people are talking about an alternative pathway for kids who don't respond well to the traditional academic learning environment and aren't likely to go to Harvard. In this view, all kids would have to pass something like a gateway exam in the tenth grade, and then they would branch off into either a college or a career track.

"Other people are saying something else, that our schools are dangerously separated from how people make a living. They're saying that all kids, whether they're going on to college or not, could use this kind of applied curriculum."

Like Pennington, Lipsitz subscribes to the latter view: "It shouldn't just be a branching off for some kids," she says. "It should be a central element of education for all kids—just like math and English and science."

"If we believe a school-to-work mechanism does really great stuff for kids, then we should be doing it for all kids," adds Larry Rosenstock, of the Rindge School in Cambridge, Massachusetts, and a leading advocate for applied, career-oriented learning.

Rosenstock condemns limiting school-to-career instruction to "non-college" children as undemocratic. "We should not design programs specifically for the non-college bound because, by doing so, we are segregating kids by social class at the front end. Whenever you segregate kids, you inevitably do so by social class, not by intelligence."

"When people talk about doing things for the non-college bound," Rosenstock says, "they're not talking about their own kids."

Lipsitz worries also that so long as school-to-career instruction remains a special program for some students, it will be vulnerable to shifting political and budgetary tides: "Ancillary programs are easily lopped off," she says. Ideally, Lipsitz adds, "You're talking about reforms that go much closer to the heart of the whole educational enterprise. You're talking about a change at the core."

The remaining equity question: While much of the debate over school-to-career initiatives has concerned tracking, another equally important equity issue has

> [I]n their efforts to involve employers and develop a new non-baccalaureate track to stable careers, will school-to-career enthusiasts inadvertently screen out poor and disadvantaged children and leave them even further behind?

received far less attention. Specifically, in their efforts to involve employers and develop a new non-baccalaureate track to stable careers, will school-to-career enthusiasts inadvertently screen out poor and disadvantaged children and leave them even further behind?

Here there are no easy answers—only an ongoing tension between the sometimes conflicting goals of building an effective track for the many, versus ensuring successful participation for those with special needs and disadvantages.

This tension is particularly acute in youth apprenticeship. "This is an economic activity that business engages in because it is to their economic benefit, not because it is a fine, humanitarian, socially good thing to do," National Alliance of Business president William Kolberg says flatly. "It should be geared to kids who are good," says Pennsylvania education secretary Don Carroll. "The target population should be a class-act population."

Such attitudes cause a problem, says Thomas Faison of Chapel Hill's MDC, Inc., "that whenever you deal with employers, they only want the best kids. The challenge is to get employers to understand that kids who don't necessarily look like the best candidates can turn out to be pretty good."

Richard Kazis argues that "there are advantages to having a system where people compete for the better opportunities based on accomplishment and merit." On the other hand, he allows, "recruitment efforts targeted to minorities and non-traditional groups must be aggressive. And academic and social support services must be available so that less advantaged students do not simply drop out and fail."

While some pilot programs—such as Project ProTech in Boston—show that apprenticeship can be applied successfully to inner city students, an open question remains whether the aggressive recruitment and support for disadvantaged youth would be commonplace in an expanded apprenticeship system.

The danger is clear, Halperin allows. "The most disadvantaged in our society seldom get resources that are commensurate with everyone else, never mind the resources they need to overcome their handicap," he says. "It's the job of government and foundations to see that adequate attention is paid to the disadvantaged. If you don't do that, there will be creaming."

Hilary Pennington, too, believes that "the equity concern is a very real concern." Yet she insists that the way to address that concern ought not be to lower expectations. "What you want to do is to create programs that have the same standards for all kids and then provide the added supports disadvantaged kids need to meet the standards. If you lower standards for some kids you're not doing the kids any favors, and you're not doing the employers a favor."

Anne Heald of the Center for Learning and Competitiveness agrees. "A special strategy for at-risk youth cannot work without a fundamental reform of the main institutions. Seventy-five percent of the kids aren't getting what they need in our educational system today.

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—Hilary Pennington

That's too much to ask for any one change to grapple with all at once," she says. "One of the big challenges of the school-to-work movement is not to dummy down its expectations."

"At-risk kids need a lot more investment and a lot more attention [than other kids]," echoes Halperin, "but it's a matter of degree and not kind." Nonetheless Halperin's question remains unanswered: "Will you put in the resources you know from experience you need in order to bring people up to level they need [to be competitive]?"

This question is especially important for youth who have already dropped out of school. As the *America's Choice* report noted, "Not only [does our country] make little effort to help our potential dropouts stay in school, but after they do drop out, our society makes even less of an effort to recover them... If total federal, state, and local funding for 'second chance' programs were applied to all current dropouts, we would spend the equivalent of only $235 annually per dropout in the nation."

Despite producing steady and significant improvements in participants' education, employment, and earnings, the federal government's Job Corps program has space for only 40,000 youth at a time—"one percent of the youth actively seeking work and only a small fraction of the high-risk population the Job Corps is designed to serve." Likewise, drop-in centers, alternative high schools, and youth conservation and service corps programs are all promising (though expensive) approaches for reclaiming

dropouts and launching them on a path to competitive skills and gainful employment. None is now commonplace in the American youth development landscape.

Though the federal school-to-work opportunities law recently signed by President Clinton makes programs for out-of-school youth eligible for funding, this inattention to school dropouts threatens to persist or even worsen under an expanded school-to-career system. "States should be required [under the new federal program] to show in their plans how they will encourage programs for out-of-school youth," writes Kazis. "The only problem, as always, is money. In a federal budget where all domestic programs are being underfunded, there is an element of robbing Peter to pay Paul."

The Question of Guidance: One of the most frequently asked questions in the school-to-career debate: Is it fair or reasonable to expect young people to make significant career choices as early as the 10th grade?

School-to-career advocates offer this telling response: "We already permit them to make life choices in the 10th grade—and our young people are making the wrong choices. Many drop out at this stage. Many more simply give up on education and 'mark time' for the next two years before drifting into the labor market after graduation, unskilled and unprepared," says one Jobs For the Future report. "The problem isn't making choices, it is making *informed* choices."

[T]o the extent these programs require 10th grade students (and their parents) to choose between college-prep and a vocational preparation track, and to select a given occupational theme on which to concentrate, the importance of strong and early guidance and career exploration only grows.

Advocates note also that "an educational system more closely tied to the world of work will provide 10th graders better information upon which to make the choices they already are making." And they stress that most school-to-career programs are designed carefully not to close off the option of seeking a bachelors degree.

Yet to the extent these programs require 10th grade students (and their parents) to choose between college-prep and a vocational preparation track, and to select a given occupational theme on which to concentrate, the importance of strong and early guidance and career exploration only grows. Yet as this paper pointed out earlier, good guidance remains a rarity in American schools and youth development programs. "We must place new emphasis on career education and guidance," writes Kazis. "Career education should become part of the K-12 curriculum so that our children have a rich understanding of the industries that drive our economy and the occupational opportunities within them."

A handful of states like Indiana have projects underway to implement such early and enlightened guidance systems. Most do not, however. Without special efforts not now in place, the guidance challenge inherent in the school-to-career formula may never be met.

Too much emphasis on bread-winning?: Does the school-to-career movement, as some critics suggest, place too much emphasis on preparing youth for occupations and not enough on preparing them for contribution and citizenship?

One foundation, the Lilly Endowment, puts it this way: "Young people need opportunities that instill values and challenge their skills, decision-making abilities, interests, ideas, world-views and capacities to care. Opportunities for such growth are optimal when youth are engaged in community problem-solving and contributing to the welfare of others."

Stephen Hamilton, who came to champion the apprenticeship cause from a human development rather than an economics background, insists that the heavy emphasis on vocational preparation and work-based learning is not misplaced. "Learning to work means learning to be an adult," he says. "The transition from childhood to adulthood is the transition from financial dependence on your family to being able to support yourself and perhaps a family. Our society makes it very difficult to make that step of achieving financial independence."

Certainly, the tendency in school-to-career programs will be less toward reading *Silas Marner* and *Moby Dick* and more toward deciphering blue prints and mastering computer spreadsheets. Yet cognitive scientists and school-to-career advocates insist that the greater immediacy of applied instruction over the traditional academic approach makes this trade-off more than worthwhile. Moreover, suggest *The Forgotten Half* and countless other studies, lack of vocational preparation and occupational opportunity contributes to such epidemic social problems as crime, drug abuse, and out-of-wedlock childbearing.

Nonetheless, an argument can be made that the school-to-career movement is presently missing out on the

chance to make youth service and service-learning an integral part of the new youth development agenda. To be fair, youth service does often receive at least passing mention from school-to-career advocates. One *Forgotten Half* report devoted three pages to neighborhood service and

More often than not, however, rather than integrating their complementary goals, youth service and school-to-career advocates seem to operate on separate but parallel planes. This lack of integration may be an important missed opportunity.

youth service corps programs, and Jobs For the Future's Richard Kazis included a short section on youth service in his recent booklet, "Improving the Transition from School to Work in the United States." More often than not, however, rather than integrating their complementary goals, youth service and school-to-career advocates seem to operate on separate but parallel planes.

This lack of integration may be an important missed opportunity. "Young people learn things in service that are very similar to what employers say they're looking for—things like team work, and problem solving," Halperin says. "I see service as an integral part of youth development, but it's still a very marginal part of American education. Service can and should be integrated throughout schooling—not treated as an add-on."

Vocation And Our Economic Future

The prospect of jump-starting a wholesale surge in the number of youth seeking technical training for skilled trades raises another fundamental question for the school-to-career movement: Are we creating a cruel hoax—a system to prepare young people for jobs that don't or won't exist? And even if the economy does continue to supply skilled jobs, will employer bias against young workers prevent youth from finding the skilled, well-paying positions we're trying to train them for?

One school of economists and social thinkers has long been predicting that the post-industrial economy will inevitably become plagued by unemployment and underemployment. George Maynard Keynes warned of the potential problem of "superfluous people" in 1930. More recently, social theorists Willis Harman and John Horrman have written, "The possibility that the world economy will not be able in the future to provide anything like full employment, as that term has been conventionally understood, is such a threatening idea that the topic seems to be a taboo." Harman's and Horrman's view is that "the long-term future of industrial society looks to be characterized by chronic unemployment and underemployment."

Fears of a jobs crisis have been heightened in recent times by Americans' increasing sense of insecurity in the face of wholesale economic restructuring—and by the enduring high unemployment rates throughout Western Europe. These trends triggered Richard Barnet to suggest in a recent article for *Harper's*, titled "The End of Jobs," that increasing automation and globalization are producing a growing class of citizens who "are not needed or wanted to provide the goods and services that the paying customers of the world can afford." It is precisely these fears that prompted President Clinton to convene western leaders for the March, 1994 "Jobs Summit" in Detroit.

At least for the foreseeable future, however, the vast

The possibility that the world economy will not be able in the future to provide anything like full employment, as that term has been conventionally understood, is such a threatening idea that the topic seems to be a taboo. The long-term future of industrial society looks to be characterized by chronic unemployment and underemployment.

majority of economists reject the notion that an age of chronic unemployment is upon us. The rapid expansion of populous, less developed nations like China, India, Mexico, and Indonesia is creating a vast new middle class in the world—and with it comes new markets for

American [and European] goods and services. Economics columnist Robert Samuelson goes so far as to call the Jobs Summit "a big waste of time."

"Actually there is no global crisis [of meager job growth]," Samuelson writes, "there is only a European crisis" caused by Europe's highly socialized economy that discourages employment by levying payroll taxes roughly twice those found in America. The U.S. has created 41 million new jobs since 1970, including three million to four million since the 1990-91 recession, Samuelson notes. All of Western Europe—with a population nearly one-third larger than ours—has created only eight million net new jobs since 1970, and virtually all of these have been in government. "We have nothing to learn from the Europeans about job creation," Samuelson says, "and the lessons they can learn from us are obvious ones that—for political and social reasons—they can't adopt."

The Careers Shortage: Are Skills the Answer?: Thus, in the near-term most economic forecasters dismiss the notion of a job shortage. The more serious problem, they say, is a shortage of careers. As U.S. productivity has stagnated over the past two decades and whole categories of high-paying production jobs have been eliminated by automation and global competition, American wages have been declining or stagnant. Working class families have felt an unprecedented squeeze.

Economists concluded years ago that America's industries (and its workers) can prosper in the future only if they adopt new "high performance" management styles that eliminate wasteful layers of middle management and place a significantly greater reliance on worker skills. As of 1990, however, most American companies continued to adhere to traditional top-down management styles.

Though forecasters predict that our economy will continue to create a significant number of jobs in the service and information sectors, most agree that many of these will be dead-end jobs that require little training. Other jobs—in health care, computers, and business services, for instance—will be fairly well-compensated (and require post-secondary technical training). How many of each type of job has been a matter of heated dispute among economists in recent years.

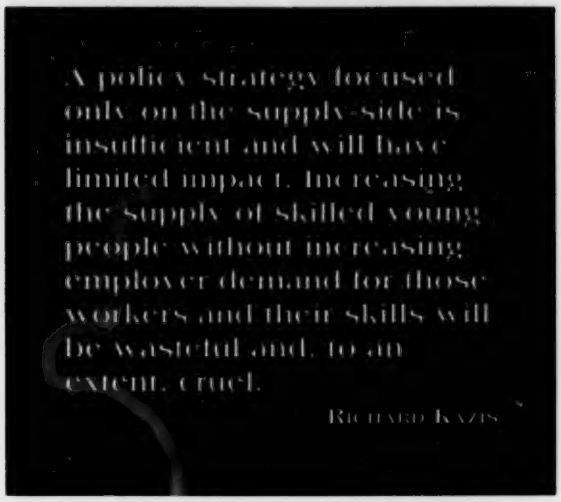
In its 1987 report, *Workforce 2000*, the Hudson Institute projected: "Between now and the year 2000, for the first time in history, a majority of all new jobs will require some post-secondary education. If the economy is to grow rapidly and American companies are to reassert their world leadership, the educational standards that have been established in the nation's schools must be raised dramatically. Put simply, students must go to school longer, study more and pass more difficult tests covering more advanced subject matter." The problem is not a lack of college graduates but a shortage of skilled non-managerial workers, the report said, given that college degrees would be needed for no more than 30 percent of new U.S. jobs—only a modest increase from the present figure of 25 percent.

But several economists argue that this perceived "skills gap" is imaginary. In its 1991 study, "The Myth of the Coming Labor Shortage," the Economic Policy Institute argued that predictions of a "skills mismatch" are "contradicted by available data, misleading in that key predictions are more wishful thinking than logical extrapolations of existing economic trends."

The root of this dispute lies in a philosophical gap between economic theorists and industry executives. Economists concluded years ago that America's industries (and its workers) can prosper in the future only if they adopt new "high performance" management styles that eliminate wasteful layers of middle management and place a significantly greater reliance on worker skills. As of 1990, however, most American companies continued to adhere to traditional top-down management styles. Eighty percent of American employers found no deficiency in the education or skills of their workers, reported the Commission on the Skills of the American Workforce. Though there is some evidence that industries are beginning to recognize and respond to a growing skills problem, only five percent of employers in 1990 felt their skill requirements would be rising rapidly in the near future.

Given this reality, an obvious question emerges: Why should we produce better-qualified workers when most employers have no use for them? Jobs For the Future labels this "the essential 'chicken and egg' issue. We know that, at present, most employers feel they have no skills shortage. We also know that, if they are to survive without lowering wage rates to the level of the Philippines, businesses will have to become more productive and that they can only do this by reorganizing production and using better-trained workers."

Clearly then, training youth for skilled trades is no economic panacea. Yet most experts nonetheless see it as critical to our nation's economic future. "The problem is not a short supply of skills for the kinds of jobs that presently exist," writes Stern, "but scarcity of skills required in the kinds of jobs that will have to be created if the nation's economy is to regain its competitive edge."


A policy strategy focused only on the supply-side is insufficient and will have limited impact. Increasing the supply of skilled young people without increasing employer demand for those workers and their skills will be wasteful and, to an extent, cruel.
Richard Kazis

"We must prepare our workforce better now not because a higher skilled workforce will inevitably lead to greater demand for high skills, but because employers had better organize their operations to demand those skills tomorrow," writes Kazis. "A policy strategy focused only on the supply-side is insufficient and will have limited impact. Increasing the supply of skilled young people without increasing employer demand for those workers and their skills will be wasteful and, to an extent, cruel." Nonetheless, Kazis admonishes, "Our nation must plan for the future *as if* employers will move more and more rapidly toward new technologies and forms of work organization."

A similar tension between economic theory and employer practice emerges over the issue of youth hiring. According to Ray Marshall and Robert Glover, even the best American employers, those most active on education issues, tend to "choose against youth." Few companies hire young people for upwardly mobile jobs, instead filling entry-level positions with older (and presumably more mature) workers. As a result most youth experience an extended "floundering period" characterized by rapid job-hopping and extended spells of unemployment.

Though understandable from the employers' perspective, this practice runs counter to America's national interest in effective labor force development. The delay in hiring American youth provides German, Japanese, and other nations' youth a five- to ten-year head start in gaining access to significant occupational skill training.

"Although youth apprenticeships aim to get 18-to-24-year-olds ready for work, employers rarely entrust key jobs to workers who are under 25," wrote the *National Journal*. School-to-career advocates see apprenticeships as a means to buck this trend, giving youth "the chance to learn responsible work habits and a credential to take to employers to prove their maturity and employability."

The Meaning Of Work

Even if the emerging crop of school-to-career programs does get institutionalized nationwide and does become an effective funnel for students into trade jobs—an uphill fight, to say the least—the school-to-career movement must answer one final question: what is the price?

Will these programs reduce youth's notions of "work" to trade employment—rather than a broader, nobler concept of achievement and contribution? Will they dampen the hopes and aspirations of students who don't seem "college material"?

In every religious and philosophical tradition, work and self-reliance are essential both to individual fulfillment and human dignity—to "full flourishing." For large and increasing numbers of young people, access to this ennobling work is tenuous at best. Yet it is important that efforts to improve young people's preparation for and success in the labor market do not lose sight of their growth as citizens and as individuals—and that those efforts help young people develop and appreciate their potential to contribute to the society around them.

What is or should be the nature of "work" and "vocation" in the information age? Some observers suggest that the time has come for a fundamental transformation of our social compact on the question of work. Former Harvard University president Derek Bok, for instance, has called for a top-to-bottom rethinking of how society compensates individuals for their varied labors. Eliot Friedson, in a paper exploring the notion "labor of love," asks: "Can a viable political economy be constructed in which unalienated labor is the norm?"

Such questions go light-years beyond the scope of this paper. Yet in light of this inquiry two observations on the school-to-career debate seem appropriate. The first is that, recalling Friedson's continuum between "alienated" labor and "labor of love," the school-to-career movement aims in an encouraging direction. To the extent its programs succeed in encouraging American employers to empower their workers and shift toward "high performance" forms of work organization, this movement will reduce the neglected majority's sense of alienation and perhaps provide them a new sense of meaning in their work.

Second, it is critical that educators, as they embrace a new challenge to help youth prepare for technical careers,

never lose sight of their mission to help children dream and strive toward labors of love. Here, service-learning appears most critical. Like the applied learning offered through other school-to-career strategies, "service learning brings a motivational dimension into the classroom as students apply skills in solving real world problems," says James Kielsmeier of the National Youth Leadership Council.

Service learning can also add an extra dimension to the applied learning process, says the Council of Chief State School Officers' Barbara Gomez: "When service is well planned and structured, youth experience personal, intellectual, and social growth... Youth gain a sense of caring and responsibility for others and an appreciation for a whole range of backgrounds and life situations." And if service learning is optimally structured, children can begin as well to develop an early understanding of civic life—learning about the public issues that affect their communities, and exploring their potential roles as contributing members of a caring society.

Certainly there should be room in the school-to-career system for this type of learning as well.

Looking Back, Thinking Ahead: What Might the Foundation and Policy Communities Do to Expand an Improved School-to-Career Movement in America?

In the preceding pages this paper has attempted to trace the roots, realities, and remaining tensions surrounding the American school-to-career movement. As the paper makes clear, the champions and catalysts and foot soldiers of this movement have made tremendous progress in the past five years shifting the public debate over education and building consensus for stronger and more systemic vocational preparation.

Their success has come for good reasons: (1) because it is based in a sound and compelling critique of America's existing educational and youth development systems; (2) because out of this critique they have fashioned a series of quite promising program models and policy reforms that show potential to dramatically improve the fortunes of the neglected majority of youth; and (3) because school-to-career reform proponents have now transformed these programmatic successes into a groundswell of political momentum for federal, state, and local action.

Foundations have played an essential role in moving ahead this long overdue school-to-career agenda. Program demonstrations, policy research, public education, leadership development, staff training, program evaluation... each of these has been critical to the forward march of the school-to-career movement, and each has received critical support from the foundation community. Policymakers have capitalized on that support to develop a range of new policies and programs.

School-to-career programs have by now achieved near consensus at the rhetorical level: Democrats and Republicans, business and labor, educators as well. But in practice, school-to-career efforts remain strikingly limited both in scope and in quality. As yet there exists no mechanism to institutionalize a school-to-career system—particularly not an enlightened system.

Without intensive and continuing effort—demonstration, research, advocacy, policy development—there is nothing to prevent the school-to-career notion from going the way of the hula hoop. Or, more likely perhaps, from being marginalized into a limited, tangential add-on to a fundamentally unchanged (and still lamentable) youth development system.

Foundations and government agencies have crucial, but different, roles to play in fostering enlightened school–to–career programs and ensuring that they are embedded as an integral component of youth development.

The Movement's Conscience: Through their grant-making, foundations have an opportunity to make sure that the dialogue over school-to-career issues not lose sight of key issues facing American youth nor lose touch with guiding American values and principles.

By presenting a philosophy that is inclusive, that recognizes the importance of guidance and character development as well as skill-building and career preparation, and that never discourages college as a goal for "non-college" students, the school-to-career prophets have deflected much of the criticism that might be expected for a work-focused education initiative. But in moving this comprehensive agenda from theory to practice, some aspects of the envisioned system will inevitably receive less attention than others. And tensions will inevitably arise placing two or more cherished values in conflict.

As this process moves forward, foundations might consider questions like:

—How might foundations ensure that the school-to-career movement not lose sight of the needs of all children for early and comprehensive guidance and vocational exploration?

—How might they effect a greater integration of service-learning into the school-to-career movement so that youth can develop a stronger sense of themselves and their potential role as contributing citizens at the same time they engage in applied learning and real-world problem-solving?

—What might they do to ensure that disadvantaged and minority youth are not forgotten in the head-long attempt to forge school-employer partnerships and build a "mainstream" track for the neglected majority of youth? How can foundations help assure that at-risk youth receive the

attention and support they need to succeed in emerging school-to-career initiatives?

Foundation officers may have other questions in this vein, or they may quibble with the ones above. But the larger point is this: as the locus of control in the school-to-career movement shifts from advocates and think tanks into the political arena, trade-offs are inevitable. Having played a key part in bringing the school-to-career movement to the forefront, foundations have an important role to play now, ensuring that the movement retains its philosophical center.

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Institutionalizing an Enlightened School-to-Career System: The larger challenge facing the entire school-to-career movement, of course, is system-building. Here it is government that must take the lead. According to Anne Heald, it is best to think of this challenge in two parts: "getting to quality, and getting to scale."

With the School-to-Work Opportunities Act, the Federal government has provided the seed money for states to encourage an increased national investment in school-to-career opportunities. Now it is up to the states —which retain most of the responsibility for educating America's children—to provide the resources and leadership to bring these programs to scale.

Inevitably, states will need assistance to ensure that new school-to-career programs are of high quality. "My biggest concern is with the question of quality," says Hilary Pennington. "With the new federal money around it's going to be incredibly easy for people to say 'we're already doing it.' The federal money is going to go broad and shallow. Foundation money ought to go deep."

Some, like Stephen Hamilton, suggest there is a great need for local intermediaries to bring schools and employers together for youth apprenticeship. At a national level, the American Youth Policy Forum plays a vital role as catalyst and convener of policymakers with employers and education leaders. Jobs For the Future has effectively played this catalyst/convener role on many occasions for states. But at the local level, says Hamilton, "It's very hard to find an existing organization that has the confidence of both the business community and the education community." *America's Choice* advocated the creation of local employment and training boards to perform this function, and David Stern has written that "unless and until such an institution is put in place, the U.S. will not have widespread participation in apprenticeship..."

By contrast, Anne Heald suggests that the greatest need in the school-to-career movement is for leadership development. "All of these criticisms [you hear about school-to-career programs] can and will come true without leadership," she says. "If you really are serious about 'system,' you need new vision and you need leadership." Halperin agreed that the leadership challenge is central, noting that key figures instrumental in launching several of the nation's most promising state initiatives—Maine Governor John McKernan, Oregon House Speaker Vera Katz, Wisconsin chief state school officer Herbert Grover, Bill Clinton in Arkansas—have since left their posts or will soon do so.

Halperin suggested that professional development is another key challenge. "Whenever you make that investment, you know it will pay off somewhere in the future—[particularly when] you expose the group you're trying to influence or educate to people who have done it."

"There's a huge list of tasks that have to be done," Halperin says. Indeed, the needs and opportunities approach infinity.

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